**📚 Students Performance Dataset 📚**

Academic Success Factors in High School Students

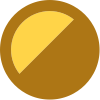


**📚 Students Performance Dataset 📚**

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**New Notebook**

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[Data Card](https://www.kaggle.com/datasets/rabieelkharoua/students-performance-dataset/data)[Code (92)](https://www.kaggle.com/datasets/rabieelkharoua/students-performance-dataset/code)[Discussion (5)](https://www.kaggle.com/datasets/rabieelkharoua/students-performance-dataset/discussion)[Suggestions (0)](https://www.kaggle.com/datasets/rabieelkharoua/students-performance-dataset/suggestions)

**About Dataset**

This dataset contains comprehensive information on 2,392 high school students, detailing their demographics, study habits, parental involvement, extracurricular activities, and academic performance. The target variable, GradeClass, classifies students' grades into distinct categories, providing a robust dataset for educational research, predictive modeling, and statistical analysis.

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* Demographic Details
* Study Habits

1. **Parental Involvement**
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**Student Information**

**Student ID**

* **StudentID**: A unique identifier assigned to each student (1001 to 3392).

**Demographic Details**

* **Age**: The age of the students ranges from 15 to 18 years.
* **Gender**: Gender of the students, where 0 represents Male and 1 represents Female.
* **Ethnicity**: The ethnicity of the students, coded as follows:
* 0: Caucasian
* 1: African American
* 2: Asian
* 3: Other
* **ParentalEducation**: The education level of the parents, coded as follows:
* 0: None
* 1: High School
* 2: Some College
* 3: Bachelor's
* 4: Higher

**Study Habits**

* **StudyTimeWeekly**: Weekly study time in hours, ranging from 0 to 20.

### Absences: Number of absences during the school year, ranging from 0 to 30.

* **Tutoring**: Tutoring status, where 0 indicates No and 1 indicates Yes.

**Parental Involvement**

* **ParentalSupport**: The level of parental support, coded as follows:
* 0: None
* 1: Low
* 2: Moderate
* 3: High
* 4: Very High

**Extracurricular Activities**

* **Extracurricular**: Participation in extracurricular activities, where 0 indicates No and 1 indicates Yes.
* **Sports**: Participation in sports, where 0 indicates No and 1 indicates Yes.
* **Music**: Participation in music activities, where 0 indicates No and 1 indicates Yes.
* **Volunteering**: Participation in volunteering, where 0 indicates No and 1 indicates Yes.

**Academic Performance**

* **GPA**: Grade Point Average on a scale from 2.0 to 4.0, influenced by study habits, parental involvement, and extracurricular activities.

**Target Variable: Grade Class**

* **GradeClass**: Classification of students' grades based on GPA:
* 0: 'A' (GPA >= 3.5)
* 1: 'B' (3.0 <= GPA < 3.5)
* 2: 'C' (2.5 <= GPA < 3.0)
* 3: 'D' (2.0 <= GPA < 2.5)
* 4: 'F' (GPA < 2.0)

**Conclusion**

This dataset offers a comprehensive view of the factors influencing students' academic performance, making it ideal for educational research, development of predictive models, and statistical analysis.

**Dataset Usage and Attribution Notice**

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**About this file**

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LINK:

<https://www.kaggle.com/datasets/rabieelkharoua/students-performance-dataset>

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**Student Performance Analysis Dashboard**

**Project Overview**

This project analyzes student performance data using an interactive Excel dashboard. The dashboard visualizes GPA and grade distribution, providing insights into student achievements and areas for improvement.

**Data Description**

* **Dataset:** Contains student performance data with columns including GPA, grades (A, B, C), and other relevant metrics.
* **Data Cleaning:** The dataset has been cleaned to remove any duplicates and handle missing values.

**Dashboard Details**

* **Dashboard Layout:** The dashboard includes various visualizations of student performance metrics.
* **Interactive Elements:** The dashboard features slicers and filters to explore different subsets of the data.
* **Key Insights:** Provides a summary of overall GPA trends, grade distributions, and other relevant performance metrics.

**PivotTables and Charts**

* **Chart 1:** [Description of what this chart shows]
* **Chart 2:** [Description of what this chart shows]
* **Chart 3:** [Description of what this chart shows]
* **Chart 4:** [Description of what this chart shows]
* **Chart 5:** [Description of what this chart shows]
* **Chart 6:** [Description of what this chart shows]

**Instructions**

1. Open the workbook in Excel.
2. Navigate to the "Dashboard" sheet to view the main dashboard.
3. Use the slicers and filters to interact with the data.
4. Refer to individual sheets for detailed PivotTable charts.

**Technical Details**

* **Software Used:** Microsoft Excel [Version]
* **Key Formulas:** MAX, MIN, PivotTable settings for calculating highest and lowest GPA.

**Contact Information**

For questions or feedback, please contact [Your Name] at [Your Email Address].

**Licensing**

This project is licensed under [License Name] (if applicable).